

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A semiconductor device comprising:
a pixel portion comprising a plurality of switching elements[[:]] and a plurality of pixel electrodes;
an opposing electrode; and
a frame rate conversion portion,
wherein[[:]] a display signal is input to the plurality of pixel electrodes through the plurality of switching elements[[:]],
wherein all of the display signals input to the plurality of pixel electrodes have the same polarity within each frame period, with the electric potential of the opposing electrode as a reference[[:]],
wherein the frame rate conversion portion operates in synchronous with the display signals[[:]], and
wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and
wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

2. (Currently amended) A semiconductor device comprising:

a pixel portion comprising a plurality of switching elements[[:]] and a plurality of pixel electrodes;

an opposing electrode; a plurality of source signal lines; and

a frame rate conversion portion,

wherein[[:] a display signal input to the plurality of source signal lines is then input to the plurality of pixel electrodes through the plurality of switching elements[[:]],

wherein within each frame period: display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines which are adjacent to the plurality of source signal lines; and the display signals input to each of the plurality of source signal line always have the same polarity, with the electric potential of the opposing electrode as a reference[[:]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[:]], and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

3. (Currently amended) A semiconductor device comprising:

a pixel portion comprising a plurality of switching elements[[:]] and a plurality of pixel electrodes;

an opposing electrode;

a plurality of source signal lines; and

a frame rate conversion portion,

wherein[[:] a display signal input to the plurality of source signal lines is then input to the plurality of pixel electrodes through the plurality of switching elements[[:]],

wherein within each frame period: the display signals input to all of the plurality of source signal lines always have the same polarity, with the electric potential of the opposing electrode as a reference[[:]],

wherein the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference[[:]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[:], and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

4. (Currently amended) A semiconductor device comprising:

a pixel portion comprising a plurality of switching elements[[;]] and a plurality of pixel electrodes;

an opposing electrode; a plurality of source signal lines; and

a frame rate conversion portion,

wherein[[;]] a display signal input to the plurality of source signal lines is input to the plurality of pixel electrodes through the plurality of switching elements;

wherein within each frame period: display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines adjacent to the plurality of source signal lines[[;]],

wherein the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference[[;]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[;]], and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

5-15. (Canceled)

16. (Previously presented) A semiconductor display device according to any one of claims 1 to 15, wherein the switching element is: a transistor formed using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

17. (Previously presented) A computer using the semiconductor display device according to claims 1.

18. (Previously presented) A video camera using the semiconductor display device according to claim 1.

19. (Previously presented) A DVD player using the semiconductor display device according to claim 1.

20. (Currently amended) A method of driving a semiconductor display device, comprising:

a pixel portion comprising a plurality of switching elements[[;]] and a plurality of pixel electrodes;

an opposing electrode; and

a frame rate conversion portion,

wherein[[;]] display signals are input to the plurality of pixel electrodes through the plurality of switching elements[[;]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[;]], and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

21. (Currently amended) A method of driving a semiconductor display device, comprising:

a pixel portion comprising a plurality of switching elements[[;]] and a plurality of pixel electrodes;

an opposing electrode; and

a frame rate conversion portion,

wherein[[;]] display signals are input to the plurality of pixel electrodes through the plurality of switching elements[[;]],

wherein all display signals input to the plurality of pixel electrodes have the same polarity within each frame period, with the electric potential of the opposing electrode as a reference[[;]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[;]], and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an

inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

22. (Currently amended) A method of driving a semiconductor display device, comprising:

a pixel portion comprising a plurality of switching elements[[:]] and a plurality of pixel electrodes;

an opposing electrode;

a plurality of source signal lines; and

a frame rate conversion portion,

wherein[[:]] display signals input to the plurality of source signal lines are then input to the plurality of pixel electrodes through the plurality of switching elements[[:]],

wherein within each frame period: display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines adjacent to the plurality of source signal lines; and the display signals input to the plurality of source signal lines always have the same polarity, with the electric potential of the opposing electrode as a reference[[:]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[:]], and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an

inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference,and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

23. (Currently amended) A method of driving a semiconductor display device, comprising:

a pixel portion comprising a plurality of switching elements[[;]] and a plurality of pixel electrodes;

an opposing electrode;

a plurality of source signal lines; and

a frame rate conversion portion,

wherein[[;]] display signals input to the plurality of source signal lines are then input to the plurality of pixel electrodes through the plurality of switching elements[[;]],

wherein within each line period, the display signals input to all of the plurality of source signal lines always have the same polarity, with the electric potential of the opposing electrode as a reference[[;]],

wherein the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference[[;]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[;]],and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

24. (Currently amended) A method of driving a semiconductor display device, comprising:

a pixel portion comprising a plurality of switching elements[[;]] and a plurality of pixel electrodes;

an opposing electrode;

a plurality of source signal lines; and

a frame rate conversion portion,

wherein[[;]] display signals input to the plurality of source signal lines are then input to the plurality of pixel electrodes through the plurality of switching elements[[;]],

wherein display signals having mutually inverse polarities, with the electric potential of the opposing electrode as a reference, are input to source signal lines adjacent to the plurality of source signal lines within each frame period[[;]],

wherein the polarities of the display signals input to the plurality of source signal lines are mutually inverted in adjacent line periods, with the electric potential of the opposing electrode as a reference[[;]],

wherein the frame rate conversion portion operates in synchronous with the display signals[[;]], and

wherein among two arbitrary, adjacent frame periods, the display signal input to the plurality of pixels in the latter frame period to appear has an electric potential which is an inversion of the display signal input to the plurality of pixels in the former frame period, with the electric potential of the opposing electrode as a reference, and

wherein a same image is displayed in a pixel portion in the two arbitrary, adjacent frame periods.

25. (Previously presented) A semiconductor device according to claim 2, wherein the switching element is: a transistor formed over using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

26. (Previously presented) A semiconductor device according to claim 3, wherein the switching element is: a transistor formed over using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

27. (Previously presented) A semiconductor device according to claim 4, wherein the switching element is: a transistor formed over using single crystal silicon; a thin film transistor formed using polycrystalline silicon; or a thin film transistor formed using amorphous silicon.

28-38. (Canceled)

39. (Previously presented) A computer using the semiconductor display device according to claim 1.

40. (Previously presented) A computer using the semiconductor display device according to claim 2.

41. (Previously presented) A computer using the semiconductor display device according to claim 3.

42. (Previously presented) A computer using the semiconductor display device according to claim 4.

43. (Previously presented) A computer using the semiconductor display device according to claim 20.

44. (Previously presented) A computer using the semiconductor display device according to claim 21.

45. (Previously presented) A computer using the semiconductor display device according to claim 22.

46. (Previously presented) A computer using the semiconductor display device according to claim 23.

47. (Previously presented) A computer using the semiconductor display device according to claim 24.

48. (Previously presented) A video camera using the semiconductor display device according to claim 1.

49. (Previously presented) A video camera using the semiconductor display device according to claim 2.

50. (Previously presented) A video camera using the semiconductor display device according to claim 3.

51. (Previously presented) A video camera using the semiconductor display device according to claim 4.

52. (Previously presented) A video camera using the semiconductor display device according to claim 20.

53. (Previously presented) A video camera using the semiconductor display device according to claim 21.

54. (Previously presented) A video camera using the semiconductor display device according to claim 22.

55. (Previously presented) A video camera using the semiconductor display device according to claim 23.

56. (Previously presented) A video camera using the semiconductor display device according to claim 24.

57. (Previously presented) A DVD player using the semiconductor display device according to claim 1.

58. (Previously presented) A DVD player using the semiconductor display device according to claim 2.

59. (Previously presented) A DVD player using the semiconductor display device according to claim 3.

60. (Previously presented) A DVD player using the semiconductor display device according to claim 4.

61. (Previously presented) A DVD player using the semiconductor display device according to claim 20.

62. (Previously presented) A DVD player using the semiconductor display device according to claim 21.

63. (Previously presented) A DVD player using the semiconductor display device according to claim 22.

64. (Previously presented) A DVD player using the semiconductor display device according to claim 23.

65. (Previously presented) A DVD player using the semiconductor display device according to claim 24.